

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (original): A dielectric barrier discharge lamp having

- a discharge vessel, the wall of which enclose a discharge medium,
- a set of electrodes for generating dielectric barrier discharges in the discharge medium, with a dielectric barrier action in respect of at least some of the set of electrodes,
- a phosphor mixture, which is applied to part of the wall of the discharge vessel,
- a phosphor mixture comprising the following phosphor components:

R: (Y, Gd) BO₃:Eu,

G: LaPO₄(Tb) or LaPO₄:(Ce,Tb),

B: BaMgAl₁₀O₁₇:Eu

whereby

The following applies to the proportions by weight formed by the phosphor components G, G, B in the mixture:

$0.05 \leq R \leq 0.15$, $0.50 \leq G \leq 0.70$, $0.20 \leq B \leq 0.40$ and $R+G+B=1$.

2. (original): The dielectric barrier discharge lamp as claimed in claim 1, in which the following applies to the proportions by weight in the mixture:

$0.06 \leq R \leq 0.12$, $0.58 \leq G \leq 0.66$, $0.25 \leq B \leq 0.35$ and $R+G+B=1$.

3. (original): The dielectric barrier discharge lamp as claimed in claim 1, in which the discharge vessel contains xenon as discharge medium.

4. (original): The dielectric barrier discharge lamp as claimed in claim 3, in which the xenon filling pressure is in the range between 50 and 200mbar.

5. (original): The dielectric barrier discharge lamp as claimed in claim 3, in which the xenon filling pressure is in the range between 100 and 150 mbar.

6. (currently amended): The dielectric barrier discharge lamp as claimed in ~~one of the preceding claims~~ claim 1, in which the discharge vessel is formed to be flat and comprises a back plate and a front plate for the light to emerge, which is at least partly transparent to light.

7. (currently amended): The dielectric barrier discharge lamp as claimed in ~~one of claims 1 to 5~~ claim 1, in which the discharge vessel is tubular.

8. (original): The dielectric barrier discharge lamp as claimed in claim 6, having a dielectric layer between at least part of the set of electrodes and the discharge medium.

9. (original): The dielectric barrier discharge lamp as claimed in claim 8, in which the set of electrodes comprises two or more elongate electrodes which are arranged on the wall of the discharge vessel.

10. (original): The use of a dielectric barrier discharge lamp with a color temperature of 10,000 K or above for viewing X-rays.

11. (original): The use as claimed in claim 10, wherein the color temperature is more than 20,000 K, preferably more than 30,000 K, particularly preferably more than 40,000 K.

12. (currently amended): The use as claimed in claim 10, wherein the dielectric barrier discharge lamp has the features described in ~~one of claims 1 to 9~~ claim 1.